IRIS overview

Integrated Risk Information System (IRIS): IRIS assessments are the top tier source of toxicity information used by EPA and other health agencies to inform national standards, clean-up levels at local sites, and set advisory levels. IRIS assessments inform decisions under the CAA, CWA, SDWA, CERCLA/Superfund, and TSCA. The IRIS Program utilizes a multi-step process which provides multiple opportunities for public, stakeholder, and interagency engagement. The assessments are complex, multidisciplinary evaluations of scientific information, which are developed through a transparent and systematic process with robust, independent peer review. IRIS is the only federal program to provide toxicity values for both cancer and non-cancer effects.

Transparency in Improvements to IRIS

- Implemented systematic review to ensure IRIS evaluations are complete, unbiased, reproducible and transparent;
- Developed "fit-for-purpose" products to ensure IRIS remains responsive to stakeholders/partners;
- Responded to GAO: the 2017 GAO High Risk report noted significant improvement in their high risk criteria ratings specific to the IRIS Program; and,
- Planned an NAS review of the IRIS program in February 2018. NAS will issue a consensus report within 6 months.

Development of IRIS Deliverables

To support TSCA, a systematic review protocol as well as a draft document containing a preliminary hazard evaluation for hexabromocyclododecane (HBCD) was delivered to the Agency's Chemical Safety and Pollution Prevention program to support their risk evaluation. HBCD is one of the first ten chemicals designated to be evaluated under TSCA.

Final *IRIS assessments* for Ethylene Oxide, and Benzo(a)pyrene were completed; and draft IRIS assessments for Ethyl tert-Butyl Ether (ETBE), and tert-Butyl Alcohol (TBA) were released to the Science Advisory Board (SAB) for independent, external peer review.

FY 2019 Activities and Performance Plan:

IRIS will focus explicitly on efforts integral to achieving the Administrator's priorities and informing the Agency's implementation of key environmental regulations. Examples of this work include:

• Support the Agency's Implementation of TSCA: Provide scientific products and support required for TSCA implementation to the Agency's Chemical Safety and Pollution Prevention program. This will include support for risk evaluations of the first 10 TSCA chemicals (Designation of Ten Chemical Substances for Initial Risk

Εωαλυατιονο Υνδερ τηε Τοξιχ Συβστανχεο Χοντρολ Αχτ, 81 ΦΡ 91927), through to completion in FY 2019, as well as any additional chemicals identified for the pipeline of TSCA risk evaluations [TSCA section 6(b)(2)]. The program will continue its efforts to maintain and improve support of TSCA implementation.

- Support the Agency's Implementation of the Safe Drinking Water Act: Provide research and technical support to the Water program. Specifically, in support of the Safe Drinking Water and Clean Water Acts, HHRA will focus on evaluating health impacts from exposure to known and emerging, chemical and biological contaminants under the authorities of SDWA.
- Targeted support for program and regional offices, and states and tribes: Develop a portfolio of products that optimize the application of best available science and technology, with an increased focus on the specific decision needs. These more targeted assessments will promote greater throughput, and will be shaped for use by several partners, including the states, tribes, other federal agencies, and EPA's national and regional program offices.
- **Support Superfund:** Provide IRIS, Provisional Peer-Reviewed Toxicity Values (PPRTVs), and advanced exposure assessment tools as well as provide technical support to help inform EPA's clean-up decisions at contaminated Superfund, Brownfields, and hazardous waste sites, as required by RCRA and CERCLA.

The Agency is currently reviewing IRIS to ensure it supports the Agency's highest public health decision-making, and its role in supporting the TSCA program, while continuing to support all of EPA's programs.